

- 4 -

**REMARKS/ARGUMENTS**

Claims 1-14 are pending herein. Claim 1 has been amended as supported by, for example, Fig. 1 of the present application. New claim 14 has been added and recites that the thickness of the buffer layer is smaller than the thickness of the underlayer and the thickness of the semiconductor layer group, as supported by, for example, original specification page 6, paragraph [0030].

Examiner Im and SPE Lee are thanked for courtesies extended to Applicants' representative (Steven Caldwell) during a telephonic interview on January 20, 2004. The substance of that interview has been incorporated into the following remarks.

1. The objection to claim 1 on page 2 of the Office Action is noted, but deemed moot in view of rewritten claim 1 submitted above.
2. Claims 1, 3-7 and 9-13 were rejected under 35 U.S.C. §102(b) over Ohba. To the extent that this rejection might be applied against the amended claims, it is respectfully traversed.

Pending independent claim 1 recites, among other things, that an underlayer is on a substrate, a buffer layer is on the underlayer and a semiconductor layer group is on the buffer layer. Pending claim 1 has been amended to clarify that the semiconductor layer group is independent from the buffer layer and the underlayer. For the reasons discussed below, the structure recited in pending claim 1 is not disclosed or suggested in the applied prior art (Ohba).

Ohba does not disclose or suggest each and every element recited in pending claim 1, as is required to sustain a rejection under §102.<sup>1</sup> As discussed during the interview, and with reference to Fig. 6 of Ohba, semiconductor layers 12-16 correspond to active layers having p- and n-type ends (i.e., n-GaN layer 12 and p-GaN layer 16) that must be connected to electrodes 17 and 18 to function as a semiconductor device. As discussed above, pending claim 1 now recites that the semiconductor layer group, one example of which can also be a light-emitting element (see original specification page 2, paragraph [0011]), is independent from the buffer layer and the underlayer. That is, in contrast to the single buffer layer 11 shown in Fig. 6 of Ohba, Fig. 1, for example, shows that two semiconductor nitride layers

---

<sup>1</sup> Anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *In re Robertson*, 49 USPQ2d 1949, 1950 (CAFC 1999).

- 5 -

(i.e., underlayer 2 and buffer layer 3) are interposed between semiconductor layer group 4 and substrate 1. As such, even if Ohba's n-GaN contact layer 12 were to be construed to be both an active layer and a buffer layer, as appeared to be the PTO's position during the interview, layer 12 would still not be "independent from" a buffer layer and an active layer, as claimed. Indeed, according to the PTO, n-GaN contact layer 12 would correspond to a buffer layer, in addition to being an active layer.

In view of all of the foregoing, reconsideration and withdrawal of the §102 rejection over Ohba are respectfully requested.

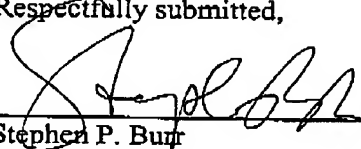
If Examiner Im believes that contact with Applicants' attorney would be advantageous toward the disposition of this case, she is herein requested to call Applicants' attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

January 22, 2004

Date

  
\_\_\_\_\_  
Stephen P. Burr  
Reg. No. 32,970

SPB:SWC:jms

BURR & BROWN  
P.O. Box 7068  
Syracuse, NY 13261-7068

Customer No.: 025191  
Telephone: (315) 233-8300  
Facsimile: (315) 233-8320